**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A control method for a wireless communications network, said network being composed of a plurality of stations communicating with a plurality of mobiles in downlink mode, ~~characterized in that~~ wherein said control method includes for a given station:

i) for a mobile served by the given station,

i1) computing ~~computation of~~ a first elementary quantity taking into account [[the]] an attenuation ($L_{v,mu}$) between each of a set of neighboring ~~station~~ stations for the mobile ~~and the mobile~~, and [[the]] a limit of total power emitted by each neighboring station for the mobile ($P_{lim}(v)$);

i2) computing an elementary product by multiplying the ~~product of the~~ first elementary quantity by a second elementary quantity, wherein the second elementary quantity ~~taking~~ takes into account [[the]] a communication requirement~~, in terms of communication,~~ of the mobile vis-à-vis a server station of the set of neighboring stations ($\xi$mu') and [[the]] an attenuation between the server station and the mobile ($L_{u,mu}$), which gives an elementary product; and

ii) ~~the control~~ controlling ~~of the~~ a link between said server station and one or more mobiles served by the given station based on a load indicator derived from the elementary products related to each of the plurality of mobiles.

2. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein it additionally includes for a predefined set of the plurality of mobiles ~~including the mobiles~~ served by a given station (u), the method further comprises:

a) ~~application of~~ applying step i) to each mobile in the predefined set, which gives elementary products;

b) calculating a summation of the elementary products obtained at step a); and

c) ~~comparison of a~~ comparing the load indicator derived from the summation made in step b) to a load threshold relative to the limit of total power emitted by the server station ($P_{lim}(u)$) to perform the control of step ii).

3. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein step i1) includes for a given neighboring station for the mobile, the method further comprises:

i11) calculating a value by division of the limit of total power emitted by ~~said~~ the given neighboring station ($P_{lim}(v)$) by the attenuation between the given neighboring station (v) and the mobile ($L_{v,mu}$); and

i12) multiplying ~~multiplication of~~ the value obtained at step i11) by [[the]] an orthogonality factor between the server station and said neighboring station.

4. (Currently Amended) A method according to claim 3, ~~characterized in that~~ wherein-step i1) includes:

k1) calculating a set of values by applying ~~application of~~ steps i11) and i12) to each neighboring station;

k2) calculating a summation of the values obtained at step k1); and

k3) adding ~~addition of the~~ an external noise to the ~~value~~ summation obtained at step k2), which gives said first elementary quantity for said given mobile.

5. (Currently Amended) A method according to claim 2, ~~characterized in that~~ wherein step c) includes computing ~~computation of the~~ a difference between the limit of total power emitted by the server station ~~antenna~~ and [[the]] a common channel power of the server station, which gives said load threshold.

6. (Currently Amended) A method according to claim 2, wherein ~~characterized in that~~ the load indicator is equal to ~~the result of~~ the summation at step b).

7. (Currently Amended) A method according to claim 6, wherein ~~characterized in that~~ the mobiles have a fixed data rate demand~~, and in that,~~ and if the ~~comparison at~~ comparing of step c) indicates that the load indicator is greater than the load threshold, the method further comprises: ~~it further includes:~~

d) removing mobiles from ~~reduction of the number of mobiles in~~ the predefined set of mobiles to create a reduced set of predefined mobiles; and

e) iterating ~~iteration of~~ steps a) to c) ~~applied to~~ for the reduced set obtained at step d).

8. (Currently Amended) A control method for a wireless communications network, said network being composed of a plurality of stations communicating in downlink mode with a plurality of mobiles having a fixed data rate, wherein said control method includes for a given station:

i) for a mobile served by the given station,

i1) computing a first elementary quantity taking into account an attenuation ($L_{v,mu}$) between each of a set of neighboring stations for the mobile, and a limit of total power emitted by each neighboring station for the mobile ($P_{lim}(v)$);

i2) computing an elementary product by multiplying the first elementary quantity by a second elementary quantity, wherein the second elementary quantity takes into account a communication requirement of the mobile vis-à-vis a server station of the set of neighboring stations (ξmu') and an attenuation between the server station and the mobile ($L_{u,mu}$), which gives an elementary product;

ii) controlling a link between said server station and one or more mobiles served by the given station based on a load indicator derived from the elementary products related to each of the plurality of mobiles;

for a predefined set of the plurality of mobiles served by a given station (u),

a) applying step i) to each mobile in the predefined set, which gives elementary products;

b) calculating a summation of the elementary products obtained at step a) in a specified order;

c) comparing the load indicator derived from the summation made in step b) to a load threshold relative to the limit of total power emitted by the server station ($P_{lim}(u)$) to perform the control of step ii);

~~A method according to claim 2, characterized in that~~ wherein the plurality of mobiles have a fixed data rate demand and in that the summation of the elementary products at step b) is performed step by step in a specified order and includes for a given initial value:

b1) ~~addition of~~ adding an elementary product, associated with a given mobile in the predefined set, to said initial value, which gives a current sum; and

b2) iteration of step c) applied to a load indicator equal to the current sum.

9. (Currently Amended) A method according to claim 8, wherein ~~characterized in that~~ step b) is further comprised of ~~additionally includes,~~ iterating steps b1) and b2) for the next elementary product, in the specified order, with the initial value as equal to the current sum obtained at the previous step b1) ~~evaluating~~ if the comparison at step b2) indicates that the load indicator is below or equal to the load threshold.~~, an iteration of steps b1) and b2) for the next elementary product, in the specified order, with an initial value taken as equal to the current sum obtained at the previous step b1).~~

10. (Currently Amended) A method according to claim 9, wherein ~~characterized in that~~ step b) is further comprised of interrupting of the summation and denial of the server station access to the mobile associated with the last added elementary product added to the mobiles associated with the following elementary products, in the specified order,

~~additionally includes,~~ if the comparison at step b2) indicates that the load indicator is above the load threshold.~~, an interruption of the summation and denial of the server station access to the mobile associated with the last added elementary product added and to the mobiles associated with the following elementary products, in the specified order.~~

11. (Currently Amended) A method according to claim 8, wherein the ~~characterized in that~~ summation of the elementary products is performed in ascending order of the elementary products.

12. (Currently Amended) A method according to claim 8, wherein the ~~characterized in that~~ summation of the elementary products is performed in random order of the elementary products.

13. (Currently Amended) A method according to claim 8, wherein the ~~characterized in that~~ summation of the elementary products is performed in an order specified as a function of predefined priorities between the associated mobiles.

14. (Currently Amended) A method according to claim 8, wherein ~~characterized in that~~ the initial value is null at the first iteration of step bl).

15. (Currently Amended) A method according to claim 2, wherein ~~characterized in that~~ the mobiles have a fixed data rate demand[[,]] and the method further comprises ~~in that it additionally includes~~ controlling access of a new candidate mobile to the server station.

16. (Cancelled).

17. (Currently Amended) A method according to claim 15, wherein ~~characterized in that~~ step c) further comprises storing ~~includes storage in a memory of~~ a stored value ~~the value resulting from~~ equal to the summation.

18. (Currently Amended) A method according to claim 17, wherein ~~characterized in that~~ the step of controlling access ~~control~~ is further comprised of ~~additionally includes~~:

j1) iterating ~~iteration of~~ step i) for said candidate mobile, which gives an elementary product associated with the candidate mobile;

j2) adding the ~~addition of this~~ elementary product to the stored value; and

j3) iterating ~~iteration of~~ step c) ~~applied to~~ for a load indicator equal to the result of step j2).

19. (Currently Amended) A method according to claim 17, further comprising ~~characterized in that the new mobile is authorized~~ authorizing the candidate mobile to access the server station if the comparison at step j3) indicates that the load indicator is below or equal to the load threshold.

20. (Currently Amended) A method according to claim 17, further comprising ~~characterized in that the new mobile is denied~~ denying access to the server station if the comparison at step j3) indicates that the load indicator is above said load threshold.

21. (Currently Amended) A method according to claim 1, wherein ~~characterized in that~~ step i2) further comprises ~~includes computation~~ computing [[of]]a quantity representing [[the]] a communication requirement ~~requirements, in terms of communication,~~ of the mobile vis-à-vis the server station ($\xi_{mu}$') from a threshold of [[the]]-a signal-to-interference-and-noise ratio ($\xi m_u$') and [[the]] an orthogonality factor between [[the]]-a set of server station channels ($\alpha$).

22. (Currently Amended) A method according to claim 21, wherein ~~characterized in that~~ step i2) ~~includes multiplication of~~ further comprises multiplying the ~~quantity representing the~~ communication requirement ~~requirements, in terms of communication,~~ of the mobile vis-à-vis the station ($\xi m_u'$) by the attenuation between the server station and the mobile ($L_{u,mu}$), which gives the second elementary quantity.

23. (Currently Amended) A method according to claim 21, wherein ~~characterized in that~~ the threshold of the signal-to-interference-and-noise ratio ($\xi m_u$) is computed from [[the]] a bit rate ($D_{bit}$) assigned to the mobile.

24. (Currently Amended) A method according to claim 6, wherein ~~characterized in that~~ the mobiles have a variable rate demand, and ~~in that~~ step il) is further comprised of: ~~initially includes:~~

i'11) computing ~~computation of the~~ a signal-to-interference-and-noise ratio threshold ($\xi m_u$) as a function of an initial bit rate value;

i'12) computing ~~computation of the quantity ($\xi mu'$) representing~~ the communication requirement ~~requirements~~ ($\xi m_u'$)~~, in terms of communication,~~ of the mobile vis-à-vis the server station as a function of the signal-to-interference-and-noise ratio threshold ($\xi m_u$) obtained at step i'11); and

modifying the initial bit rate value and iterating steps a) to c) for the new initial rate value ~~,the method additionally including,~~ if the comparison at step c) indicates that the [[sum]] summation is greater than the load threshold.~~, a modification of the initial bit rate value and an iteration of steps a) to c) for the new initial rate value.~~

25. (Currently Amended) A control device for a wireless communications network, including a plurality of stations communicating with a plurality mobiles, in

downlink mode, said device incorporating an elementary load calculator capable of computing [[the]] a load induced by a mobile ($m_u$) on a server station (u),

wherein ~~characteriz;ed in that~~ the elementary load calculator includes:

- a first function (PA1) capable of computing a first elementary quantity taking into account [[the]] a attenuation between each of a set of neighboring stations for the mobile and the mobile ($L_{v,mu}$) and [[the]] a limit of total power emitted by each neighboring station for the mobile ($P_{lim}(v)$),

- a second function (PA2) capable of computing a second elementary quantity taking into account [[the]] a communication requirement ~~requirements,~~ of the mobile vis-à-vis [[the]] a server station of the set of neighboring stations ($\xi m_u'$) and [[the]] a attenuation between the server station and the mobile ($L_{u,mu}$),

- the elementary load calculator being capable of computing the product of the first elementary quantity by the second elementary quantity (PA3), which gives an elementary product representing the load induced by the mobile (EDPAPmu),

and ~~in that~~ the device is further configured to ~~capable of controlling the~~ control a link between ~~each~~ the server station and one or more mobiles served by the given station based on a load indicator derived from the elementary products related to each of the ~~said~~ mobiles.

26. (Currently Amended) A device according to claim 25, wherein the device is further configured to ~~characterized in that it is capable of computing~~ compute respective elementary products for a predefined set of mobiles served by ~~a~~ the given station.

27. (Currently Amended) A device according to claim 26, wherein the device is further comprised of ~~characterized in that it additionally includes~~ a summation function configured to calculate a summation ~~function capable~~ of ~~summing~~ the computed elementary products.

28. (Currently Amended) A device according to claim 27, wherein the device is further comprised of ~~characterized in that it additionally includes~~ a comparator (23) configured to interact ~~interacting~~ with the summation function, the comparator being ~~capable~~ configured ~~of comparing~~ to compare a load indicator derived from the summation performed by the summation function for the server station with a load threshold related to the limit of total power emitted by the server station ($P_{lim}(u)$).

29. (Currently Amended) A device according to claim 27, further comprised of ~~characterized in that it includes~~ a threshold calculator configured to ~~capable of computing the~~ compute a difference between the limit of total power emitted by the server station ($P_{lim}(u)$) and [[the]] a common channel power of the server station ($P'(u)$), which gives said load threshold.

30. (Currently Amended) A device according to claim 25, characterized in that the first function (PA1) is capable of dividing the limit of total power emitted by a given neighboring station for the mobile ($P_{lim}(v)$) by ~~the~~ an attenuation between the given neighboring station and the mobile ($L_{v,mu}$), and of multiplying the value resulting from the division by [[the]] an orthogonality factor between the server station and said neighboring station ($\alpha_{uv}$), which gives an intermediate quantity.

31. (Currently Amended) A device according to claim 30, characterized in that the first function (PA1) is capable of computing the value of the intermediate quantity for each neighboring station for the mobile, summing the values of the intermediate quantities thus obtained, and adding [[the]] an external noise (N) to the result of the summation, which gives the first elementary quantity for said mobile.

32. (Cancelled).

33. (Previously Presented) A device according to claim 27, characterized in that it includes a load reduction function capable of reducing the number of mobiles in the predefined set of mobiles associated with the station, if the comparator indicates that the load indicator is above the load threshold.

34. (Currently Amended) A device according to claim 27, wherein ~~characterized in that~~ the mobiles have a fixed data rate demand, and the device is further comprised of ~~and in that it additionally includes~~ an access controller to control access of a candidate mobile to the station depending on the result returned by the comparator.

35. (Cancelled).

36. (Currently Amended) A device according to claim 34, wherein ~~characterized in that~~ the access controller is configured to authorize ~~is capable of authorizing~~ the new mobile ($m_u$) to access to the station (u) if the result returned by the comparator indicates that the load indicator is below or equal to the load threshold.

37. (Currently Amended) A device according to claim 34, wherein ~~characterized in that~~ the access controller is further configured ~~is capable of denying~~ to deny the new mobile access to the server station if the result returned by the comparator indicates that the load indicator is above the load threshold.

38. (Currently Amended) A device according to claim 25 ~~24~~, ~~c~~haracterized in that the second function (PA2) is capable of computing a quantity representing the requirements, in terms of communication, of the mobile vis-à-vis the server station ($\xi m_u'$) from [[the]] a threshold of [[the]] a signal-to-interference-and-noise ratio ($\xi m_u$) and [[the]] a orthogonality factor between the server station channels ($\alpha$).

39. (Currently Amended) A device according to claim 38, characterized in that the second function (PA2) is capable of multiplying the quantity representing the requirements, in terms of communication, of the mobile vis-à-vis its server station ($\xi m_u'$) by the attenuation between the station and the mobile ($L_{u,mu}$), which gives the second elementary quantity.

40. (Currently Amended) A device according to claim 38, wherein ~~characterized in that~~ the threshold of the signal-to-interference-and-noise ratio ($\xi m_u$) is computed from [[the]] a bit rate ($D_{bit}$) assigned to the mobile.

41. (Currently Amended) A device according to claim 40, wherein ~~characterized in that~~ the mobiles have a variable rate demand and ~~in that it includes~~ the device is further comprised of a load regulator, said regulator being configured to modify ~~capable of modifying~~ the bit rate value assigned to the mobiles if the result returned by the comparator indicates that the load indicator is below or equal to the load threshold.

42. (New) A control method for a wireless communications network, said network being composed of a plurality of stations communicating with a plurality of mobiles in downlink mode, characterized in that said control method includes for a given station:

i) for a mobile served by the given station,

i1) computing a first elementary quantity taking into account [[the]] an attenuation ($L_{v,mu}$) between each of a set of neighboring stations for the mobile, and a limit of total power emitted by each neighboring station for the mobile ($P_{lim}(v)$);

i2) computing an elementary product by multiplying the first elementary quantity by a second elementary quantity, wherein the second elementary quantity takes into account a communication requirement of the mobile vis-à-vis a server station of the

set of neighboring stations ($\xi mu'$) and an attenuation between the server station and the mobile ($L_{u,mu}$), which gives an elementary product; and

ii) controlling a link between said server station and one or more mobiles served by the given station based on a load indicator derived from the elementary products related to each of the plurality of mobiles,

characterized in that it additionally includes for a predefined set of the plurality of mobiles served by a given station (u):

a) applying step i) to each mobile in the predefined set, which gives elementary products;

b) calculating a summation of the elementary products obtained at step a); and

c) comparing the load indicator derived from the summation made in step b) to a load threshold relative to the limit of total power emitted by the server station ($P_{lim}(u)$) to perform the control of step ii);

wherein the load indicator is equal to the summation at step b), and

wherein the mobiles have a variable rate demand, and step il) is further comprised of:

i'11) computing e a signal-to-interference-and-noise ratio threshold ($\xi m_u$) as a function of an initial bit rate value;

i'12) computing the communication requirement ($\xi m_u'$) of the mobile vis-à-vis the server station as a function of the signal-to-interference-and-noise ratio threshold ($\xi m_u$) obtained at step i'11); and

modifying the initial bit rate value and iterating steps a) to c) for the new initial rate value if the comparison at step c) indicates that the summation is greater than the load threshold.